

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended) A long term oxygen therapy system comprising:

an oxygen supply;

at least one conduit having a first end connected to the oxygen supply and a second end being configured to pass directly through the thoracic wall and lung of a patient thereby establishing fluid communication between the oxygen supply and the inner volume of the lung, the second end of the conduit being positioned in the lung tissue; and

a sealing device connected to the at least one conduit, the sealing device being configured to provide a fluid tight seal between the at least one conduit and the thoracic wall.

Claim 2 (Currently Amended) A long term oxygen therapy system comprising:

an oxygen supply;

a valve;

a first conduit having a first end connected to the oxygen supply and a second end connected to the valve;

at least one second conduit having a first end connected to the valve and a second end having multiple branches, one of the branches being configured to pass directly through the thoracic wall and lung of a patient thereby establishing fluid communication between the oxygen supply, ~~the inner volume of the lung and the bronchus~~ and the inner volume of the lung, the one of the branches having an open end positioned in the lung tissue, another of the branches configured to pass through a bronchus thereby establishing fluid communication between the oxygen supply and the bronchus; and

sealing devices connected to the multiple branches, the sealing devices being configured to provide a fluid tight seal between the one of the branches passing through the thoracic wall and lung of the patient and the thoracic wall and a fluid tight seal between the other of the branches being configured to pass through a bronchus of the patient and the thoracic wall of the patient.

Claim 3 (Withdrawn) A method for treating hypoxemic patients having chronic obstructive pulmonary disease, the method comprising:

creating an anastomotic opening extending from the thoracic wall and into the inner volume of a lung;

supplying oxygen from a source directly into alveolar tissue of a lung through a conduit extending from the oxygen source and into the lung through the anastomotic opening; and

establishing a fluid tight seal between the anastomotic opening and the conduit.

Claim 4 (Withdrawn) A method for treating hypoxemic patients having chronic obstructive pulmonary disease, the method comprising:

creating an anastomotic opening extending from the thoracic wall and into the inner volume of a lung;

supplying oxygen from a source directly into alveolar tissue of a lung through a conduit extending from the oxygen source and into the lung through the anastomotic opening;

establishing a fluid tight seal between the anastomotic opening and the conduit; and

venting air from the lung into the bronchus through a second conduit.